

Remarks:

Claims 1-18 remain for consideration in this application. Claim 1 is the only independent claim.

Referring to paragraph 2 of the Office Action, the Applicants apologize for the typographical error in the Information Disclosure Statement (IDS). As the Examiner correctly concluded, the reference should be U.S. Patent No. 6,329,118 to Hussein et al., which was correctly listed on the same IDS.

Turning now to paragraph 3 of the Office Action, the Examiner rejected claims 1 and 8-18 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,649,515 to Moon et al. in view of U.S. Patent No. 6,156,479 to Meador et al. The Examiner stated that Moon et al. disclose applying a fill composition to a contact or via hole having a bottom and sidewall, but they do not describe any specific formulation of the composition. The Examiner further asserted that it would be obvious to combine this use of the fill composition with the formulation of an antireflective coating described in Meador et al., and that the Meador et al. compositions would inherently possess the claimed properties due to the alleged similarity of ingredients in the Meador et al. compositions and those of the present application.

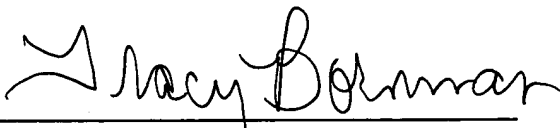
In order to rebut the Examiner's position, the Applicants have duplicated the formulation described in Example 1 of the Meador et al. patent and performed the pre-bake thermal stability test and the film shrinkage test described in the Application. See Application, page 17, lines 30-31; page 18, lines 1-21; page 19, lines 11-26. The pre-bake thermal stability test is used to determine the degree of cross-linking during the pre-bake stage, and the film shrinkage test measures the fill material film between the pre-bake and final bake. The Examiner's attention is directed to the attached Declaration executed by Xie Shao, one of the inventors named on this application. In that Declaration, there is a table that lists the results of both tests.

Claim 1 of the present application recites that the composition is at least about 70% removed when subjected to a pre-bake thermal stability test, and has less than about 15% shrinkage when subjected to a film shrinkage test. The Meador et al. formulation tested in the declaration passed the

film shrinkage test. However, the Meador et al. formulation did not pass the pre-bake thermal stability test. In the tests performed on the Meador et al. antireflective coating, the percentage of film removed was close to 0%; that is, the thickness essentially remained the same, resulting in virtually no removal of the film. Therefore, the Meador et al. formulation does not inherently possess the claimed property of being at least 70% removed when subjected to a pre-bake thermal stability test. For this reason, the Meador et al. fails to supplement the teachings of the Moon et al. reference. Furthermore, there is no teaching or suggestion to modify the teachings of these references to obtain this property. It is respectfully submitted that the prior art of record does not teach or suggest a composition that simultaneously possesses the claimed properties and, as a result, this rejection should be withdrawn.

It is believed that no further issues remain in this application. In view of the foregoing, a Notice of Allowance is respectfully requested. Any fee which is due in connection with this Statement should be applied against Deposit Account No. 19-0522.

Respectfully submitted,

By 
Tracy Bornman, Reg. No. 42,347
HOVEY WILLIAMS LLP
2405 Grand Boulevard, Suite 400
Kansas City, Missouri 64108
(816) 474-9050